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| 10/092,181 | 03/05/2002 | Subodh A. Samuel | 14012-084001/82-04-009 | 7558 |
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| FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | TRUONG, LAN DAI T | |
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DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

1. This action is response to communications: application, filed on 03/05/2002; amendment filed 02/16/2006. Claims 1-17 are pending; claims 1, 2, 6 and 11 are amended

2. The applicant's arguments with respect to claims 1 and 11, filed on 02/16/2006 have been considered but are moot in view of the new ground(s) of rejection.

Claim rejections-35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3, 6, 8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kovarik et al. (U.S. 7,020,717), “Kovarik”, herein after.

Regarding to claim 1:

Kovarik discloses a method, which can be implemented in a computer hardware or software code for distributing software, comprising:

Distributing a message from an application server to one or more application layer routers: (Kovarik discloses a distributed message system; wherein “a topic server” which is equivalent to “an application server” selects a suitable message router from a state message routers table to distributes a message to consumers based upon registered subscriberTopic message: column 2, lines 33-36; column 5, lines 49-54; column 6, lines 13-28, lines 62-67; column 7, lines 10-67)

Distributing the message from the one or more application routers to the one or more endpoints: (the topic server selects a suitable message router to distributes a message to consumers based upon registered subscriberTopic message: column 5, lines 49-54; column 7, lines 10-67)

At least the one or more application layer routers registering with the application server to receive message in accordance with configuration data of one or more endpoints: (Kovarik discloses the message router is a service application which can service application service requests to transmit and receive data message. Kovarik also discloses network message traffic and network configuration which supports associations between three components such as “message router” which is equivalent to “router”, “ message topic server” which is equivalent to “application server” and “message consumer” which is equivalent to “endpoints” upon on

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registered subscriberTopic message; wherein the message router registers subscriberTopic message to message topic server for delivering: column 5, lines 49-54; column 6, lines 54-67; column 7, lines 10-67; column 9. lines 9-25)

At least the one or more endpoints registering with the one or more application layer routers to receive messages in accordance with the configuration data of the one or more endpoints: (Kovarik discloses network message traffic and network configuration which supports associations between three components such as “message router” which is equivalent to “router”, “ message topic server” which is equivalent to “application server” and “message consumer” which is equivalent to “endpoints” upon registers subscriberTopic message; wherein consumers transmits subscriberTopic message to message routers in order to register subscriberTopic message to the message topic server: column 11, lines 1-67; column 5, lines 49-54; column 6, lines 54-67; column 7, lines 10-67; column 9. lines 9-25)

First channels selected from a first channel layer: (Kovarik discloses upon receiving subscriberTopic message from the message router, the message topic server searches to find a suitable message router from the list of message routers who have registered message topics in the message topic server: column 10, lines 17-38)

Second channels selected from a second channel layer: (Kovarik discloses the message router deliveries message to respective consumer based upon received subscriberTopic message from the consumer: column 7, lines 10-67; column 9. lines 9-25)

Regarding to claim 2:

Kovarik discloses a method as discuss in claim 1, which further includes distributing the message to one or more second application layer routers through one or more second channels

selected from a second layer: (Kovarik discloses the message is delivery to consumers through two inter-processed communication link message routers: abstract, lines 1-12)

Distributing the message to the endpoint through one or more third channel selected from a third channel layer: (Kovarik discloses the message router transmits the message to consumer based upon registered subscriberTopic message: (column 5, lines 49-54; column 7, lines 10-67)

Regarding to claim 3:

Kovarik discloses a method as discuss in claim 1, which further includes wherein the first channel and the second channel are selected by the application server: (Kovarik discloses upon receiving subscriberTopic message from the message router, the message topic server searches to find a suitable message router from the list of message routers who have registered message topics in the message topic server: column 10, lines 17-38)

Regarding to claim 6:

Kovarik discloses a method as discuss in claim 1, which further includes distributing storing the message at the selected application layer router; and distributing the message to the endpoint through one or more second channels selected from the second channel layer after the occurrence of a predetermined event: (Kovarik discloses the message topic server searches to find a suitable message router from the list of message routers who have registered message topics in the message topic server: column 10, lines 17-38)

Regarding to claim 8:

Kovarik discloses a method as discuss in claim 1, which further includes determining a sequence from the message prior to distributing the message from the application server to one or more application router: (Kovarik discloses the message is transmitted to message routers

prior sending to consumers: column 11, lines 1-67; column 5, lines 49-54; column 6, lines 54-67; column 7, lines 10-67; column 9, lines 9-25)

Regarding to claim 11:

Kovarik discloses a system, which can be implemented in a computer hardware or software code for distributing software, comprising:

The message is distributed to the first application router in response to at least the application layer router registering with application server to receive messages in accordance with configuration data of at least a first endpoint: (Kovarik discloses “the message router” which is equivalent to “application router” is a service application which can service application service requests to transmit and receive data message. Kovarik also discloses network message traffic and network configuration which supports associations between three components such as “message router” which is equivalent to “application router”, “ message topic server” which is equivalent to “application server” and “message consumer” which is equivalent to “endpoints” upon on registered subscriberTopic message; wherein consumers transmit subscriberTopic message to message routers in order to register message topics to the message topic server; the message router then registers the subscriberTopic message to message topic server for delivering: column 5, lines 49-54; column 6, lines 54-67; column 7, lines 10-67; column 9, lines 9-25)

The message is distributed to the second application router in response to at least the second application layer router registering with application server to receive message accordance with configuration data of at least a second endpoint: (Kovarik discloses the message topic server maintains a state table includes list of “registered routers” which is equivalent to “the first and

the second router.” The message topic server can associate the message router with the subscriberTopic message in order to choose a suitable router for delivering message to respective consumer: column 5, lines 49-54; column 6, lines 54-67; column 7, lines 10-67; column 9, lines 9-25)

The second endpoint receiving the message from the second channel layer: (Kovarik discloses the message router as intermediary from delivering a message to consumer: column 5, lines 49-54; column 6, lines 54-67; column 7, lines 10-67; column 9, lines 9-25)

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5, 7, 9 and 12 are rejected under 35 U.S.C 103(a) as being un-patentable over Kovarik and in view of Datta et al. (U.S. 6,493,341)

Regarding to claim 5:

Kovarik discloses the invention substantially as disclosed in claim 1, but does not explicitly teach wherein the first channel and the second channel are selected by the application server based on the available data processing capacity of the selected application layer router.

However, Datta discloses a high-speed interconnection communication system for delivering data between two or more sites; wherein multiple software routers are used to provide multiple links between two or more sites. The controller software selects the routers have highest available bandwidth to delivery message, see (Datta: column 4, lines 1-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Datta's ideas of choosing the router has highest bandwidth with Kovarik's systems in order to provide high-speed interconnection communication system, see (Datta: column 4, lines 4-14).

Regarding to claims 4 and 7:

Kovarik discloses the invention substantially as disclosed in claims 1 and 6, but does not explicitly teach wherein the predetermined event is one or more of the group comprising receipt of a bandwidth availability message, and receipt of a processor capacity availability message.

However, Datta discloses a high-speed interconnection communication system for delivering data between two or more sites; wherein multiple software routers are used to provide multiple links between two or more sites. The controller software selects the routers have highest available bandwidth to delivery message, see (Datta: column 4, lines 1-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Datta's ideas of choosing the router has highest bandwidth with Kovarik's systems in order to provide high-speed interconnection communication system, see (Datta: column 4, lines 4-14).

Regarding to claim 9:

Kovarik discloses the invention substantially as disclosed in claim 8, but does not explicitly teach wherein determining the sequence comprises determining the sequence base on one or more of the group comprising data communications bandwidth availability between the application server and the endpoint, processing capacity of one or more of the application layer routers, processing capacity of a gateway receiving messages from the endpoint and the application server, and data communications bandwidth availability between the endpoint and the gateway.

However, Datta discloses a high-speed interconnection communication system for delivering data between two or more sites; Datta discloses a router which services as the default gateway also maintains a table of routes for different destination address; selecting shortest paths where the path is represented as list of routers through them the data is reach to destination; The controller software selects the routers has highest available bandwidth to delivery message, see (Datta: column 4, lines 1-67; column 2, lines 34-40; column 17, lines 1-27)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Datta's ideas of choosing the router has highest bandwidth with Kovarik's systems in order to provide high-speed interconnection communication system, see (Datta: column 4, lines 4-14).

Regarding to claim 12:

Kovarik discloses the invention substantially as disclosed in claim 11, but does not explicitly teach wherein the application server further comprises a bandwidth allocation system transmitting the message.

However, Datta discloses a high-speed interconnection communication system for delivering data between two or more sites; wherein multiple software routers are used to provide multiple links between two or more sites. The controller software selects the routers have highest available bandwidth to delivery message, see (Datta: column 4, lines 1-67).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Datta's ideas of choosing the router has highest bandwidth with Kovarik's systems in order to provide high-speed interconnection communication system, see (Datta: column 4, lines 4-14).

Claims 13-14, 16-17 are rejected under 35 U.S.C 103(a) as being un-patentable over Kovarik in view of Crowle (U.S. 5,857,072)

Regarding to claim 14:

Kovarik discloses the invention substantially as disclosed in claim 11, but does not explicitly teach wherein the first application layer router further comprises a router controller storing the message prior to transmitting the message over the first channel

In analogous art, Crowle discloses "master server" which is equivalent to "controller" which stores and distributes the "data" which is equivalent to "message" to sub-servers: (column 10, lines 29-42).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Crowle's ideas of distributing files from a master server to an end user through "routers" which is equivalent to "first channels," and "bridges" which is equivalent to "second channel" with Kovarik's system in order to provide higher transfer rate communication system, see (Kovarik: column 3, line 14).

Regarding to claim 16:

In addition to rejection in claim 14, Kovarik-Crowle further discloses wherein the router controller further comprises an event base message system storing the message until the occurrence of a predetermined event: (Kovarik disclose the router receives and sends a message from a publisher to subscribers according to registered message topics: column 5, lines 49-54)

Regarding to claim 13:

Kovarik discloses the invention substantially as disclosed in claim 11, but does not explicitly teach wherein the application server further comprises an event based sequencing system transmitting the message

However, Crowle discloses each “network location” which is equivalent to “endpoints” responses an IVE-GOT message providing specifics about the data it currently contains. The “data server” which is equivalent to “application server” then uses the data returned from the network location to determine whether all appreciate locations received the data, and start a new data distribution cycle: column 7, lines 18-31).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Crowle’s ideas of responding an IVE-GOT message providing specifics about the data it currently contains with Kovarik’s system in order to perform data distribution cycle.

Regarding to claim 17:

Kovarik discloses the invention substantially as disclosed in claim 11, but does not explicitly teach a gateway receiving response data from the end point generated in response to the message

However, Crowle discloses each “network locations” which is equivalent to “endpoints” responses an IVE-GOT message providing specifics about the data it currently contains. The “data server” which is equivalent to “gateway” which uses the data returned from the network location to determine whether all appreciate locations received the data, and starts a new data distribution cycle: column 7, lines 18-31).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Crowle’s ideas of responding an IVE-GOT message providing specifics about the data it currently contains with Kovarik’s system in order to indicate the status of communication.

Claim 15 is rejected under 35 U.S.C 103(a) as being un-patentable over Kovarik-Crowle in view of Miller et al. (U.S. 6,907,011)

Regarding to claim 15:

Kovarik-Crowle discloses the invention substantially as disclosed in claim 14, but does not explicitly teach wherein the router controller further comprises a message timing system storing the message for a predetermined period of time

In analogous art, Miller discloses publish/subscribe system is achieved by quiescing data messages: (abstract, lines 1-14; column 2, lines 14-20)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Miller’s ideas of quiesced distributing data messages Kovarik-

Crowle's system in order to provide the quiesced routing network, see (Miller: column 2, lines 14-20)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusions

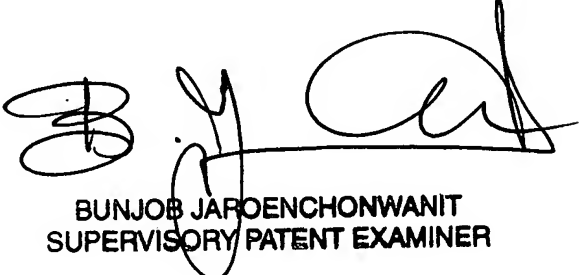
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan-Dai Thi Truong whose telephone number is 571-272-7959. The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob A. Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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